

differences of interpretation are further reason for treating Gray's (1856) use of the name as the first available, as proposed in Case 3044.

In conclusion, Bruce and McAllan take us to task for not consulting them on the formulation of Case 3044 — but have obviously forgotten why.

At the meeting at which the SCON directed us to prepare the proposal, we asked them to do it. They refused, one of them commenting to the effect that they had done their part in digging up the unused names and now it was up to others to provide solutions.

**Comment on the proposed conservation of usage of 15 mammal specific names based on wild species which are antedated by or contemporary with those based on domestic animals**

(Case 3010; see BZN 53: 28–37, 125, 192–200, 286–288; 54: 119–129, 189; 55: 43–46, 119–120; 56: 72–73)

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1. Gentry, Clutton-Brock & Groves address a contentious issue and their recommendations have received much support, but the consequences of their application are still unclear. Their agenda obliges us to consider wild names to the exclusion of other issues. Yet beyond this restricted remit it raises questions which should be answered prior to adjudication on the application itself. Approval may otherwise amount to a *fait accompli*, leaving problems to be settled by further appeal to the Commission. The submission suggests that there is a majority usage which should override application of the Code; junior species names should be retained for populations which are regarded as conspecific with others, to which senior names are assigned. The Commission is effectively asked to rule that certain species-group names are to be applied to particular populations within taxa (hence restraining the subjective use of synonymy), without requesting a general ruling on their priority. The application is therefore unusual. In the guise of a nomenclatural ruling, it is eliciting a systematic decision from the Commission (see Gardner in BZN 54: 125–126). Doubtless the Commission will carefully consider whether it is appropriate to use its plenary powers in such a context.

2. The formal request 'that the name for each of the wild species' listed is not invalid by virtue of being antedated by a name based on a domestic form' does not specify that the wild names must be used in the form of binomina. A trinomen — for example *Bos taurus primigenius* — would be within the letter of the request, for the wild name would retain validity. Although this is not what Gentry et al. intend, it is the literal meaning of their formal request that must be addressed. Perhaps it requires revision.

3. The application has insufficient space to discuss each of the 15 taxa separately. Such different instances as *Camelus ferus* and *Canis lupus* are lumped together. Not all the species have experienced 'traditional' separate naming for wild and domestic forms. *Bos mutus*, *Camelus ferus*, *Bubalus arnee* and *Equus africanus* were foisted upon the scientific community as replacements for species names based on domestic

types (see Bohlken, 1958), even where the domestic name had been in customary usage for the whole species and the nomenclature had been stable. There are few references in the *Zoological Record* to wild populations of African asses, Bactrian camels, water buffaloes or yaks during the last 20 years and either wild or domestic names are being used for them. There are hardly any references to tarpans. Przewalski's wild horses are most commonly cited as *E. przewalskii* rather than *E. ferus przewalskii*. For the animals mentioned in this paragraph, evidence for a strong feeling to retain the 'wild' species names is deficient — hardly majority usage — and the preponderant concept in the scientific community has been of whole or 'global' species, domestic, feral and wild populations included, bearing the earliest available (domestic) name. Nowak (1991) for instance cited *Equus asinus*, *Camelus bactrianus*, *Bubalus bubalis* and *Bos grunniens* as the names of the species, and so did Zeuner (1963) in his authoritative 'History', with the addition of *E. caballus ferus*.

4. Strong feelings have been expressed concerning 'wild' and 'domestic' names. It would be 'theoretically irrelevant' and 'grossly disruptive to long-standing nomenclature' (see Corbet, 1997) to include domestic animals within the appropriate biological species. Yet it is also anomalous to justify systematic treatment on the basis of long usage. Long usage could keep the North American red fox as a separate species *Vulpes fulvus* from the European *V. vulpes*, for instance, though we know better. The 'traditional' separate naming of domestic and wild forms, to which Gentry et al. refer, exists mainly by default, not by general approbation and does not have to be perpetuated. I am at a loss to see how a double nomenclature is so particularly felicitous where the domestic or wild status of archaeological material is contentious (see Corbet in BZN 53: 193). There is no difficulty in using a single species name for both domestic and wild populations among birds, pigs, rabbits, rats or mice, so there can be no need for separate naming per se, although this defence is constantly being pressed.

5. The authors of the application do not request rulings that wild and domestic populations should be treated as separate species or that 'domestic' names should be suppressed; they expressly omit evaluation of their status (Gentry, Clutton-Brock & Groves, BZN 54: 127–129). Yet questions raised by Schodde and others (BZN 54: 123–127) still deserve answers. What options or constraints arise from the application? Do we approve of them? Which name should systematists adopt in referring to the whole species if they consider wild and domestic populations to be conspecific (see Bock in BZN 54: 125)? If both *Bos taurus* and *Bos primigenius* are in currency, which is the name of the species? Would a formalisation of the 'traditional' double nomenclature (see Schodde in BZN 54: 123–124 and Bock in BZN 54: 125–126) be forced upon us or not? Would ostensibly single biological species be divided into separate wild and domestic species (a systematic interpretation masquerading as a nomenclatural decision)? Using the name *Bos primigenius* for both domestic cattle and aurochs (see Macdonald, 1984), and *Equus ferus* for the domestic horse (see Duncan, 1992) may become more common unless implications relating to priority and synonymy are clearly set out and uncertainties are resolved.

6. The application pre-empts the many unresolved systematic or nomenclatural issues concerning mammal species experiencing domestication, though there is no space to enumerate the references here. What does one conclude from challenges to the availability of *Bos primigenius* and *Ovis orientalis*? Is the type population of *Cavia*

*aperea* wild or feral? Is it conspecific with the domestic guinea pig anyway? Is the name based on a guinea pig rather than some other caviid? Are domestic asses, river buffaloes and Bactrian camels different taxa from wild populations, having originated from different wild subspecies? Was the tarpan truly wild? It is premature to make nomenclatural proposals when even wild status, or ancestry of domestic populations, are not yet clear.

7. The principal objective of the Code is to promote stability and universality in the scientific names of animals. To achieve this objective we should treat each species separately, review systematics, and evaluate both 'wild' and 'domestic' names. Usage should be assessed and not assumed. Only then would it be decided what species name could be adopted, subject to ruling by the Commission where needed. Some domestic names would be used as names of species; others might be suppressed or discarded. Systematic opinion is supposed to be paramount in determining synonymy and must be clearly reflected in the nomenclature. Provision of a single name for each biological species is, I suggest, superior to the 'double' names format, seemingly an inevitable outcome of the present application. Domestic names as names of species would not pose unique problems. Nomenclature is always at risk from changes in systematic opinion, from new discoveries, and new interpretations. Erstwhile minority usage becomes the norm; check-lists are soon out of date. It would be a mistake to think that systematic stability is an attainable goal. Purely systematic decisions continue to change the names of well-known and familiar mammals. Thomson's gazelle, *Gazella thomsonii*, is to be assigned to *Eudorcas rufifrons*; *Palaeotaxodon antiquus* becomes *Elephas namadicus*; and vigorous discussions are in progress concerning species limits in *Galago*, *Callithrix*, *Pan*, *Canis*, *Ovis* and many other genera. Authors, including CITES, are able to handle changes and come to terms with their consequences. They are not obliged to follow new or unpalatable systematic opinions yet feel no need to direct dissent towards the Commission. They remain free to treat domestic and wild populations as separate species if they so wish. Where appropriate we should retain senior names based on domestic animals, unrestrained within the nomenclature of biological species and subspecies. Our apocryphal customs officer will not be fooled by a label; he has already addressed more intransigent cases (Marshall, 1990). Workers dealing with wild mammals are intelligent beings. They would understand what was meant by *Camelus bactrianus ferus*, *Bubalus bubalis arnee* or *Equus caballus przewalskii*.

I am grateful to Anthea Gentry for information and discussion, for suffering my persistent argumentativeness, and for helping to stimulate some of the ideas expressed above.

## References

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